

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	91	(544/203).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:15
L2	2	("6355797").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:15
L3	37	Tjay.inv. and Tjioe.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:24
L4	2	Eric.inv. and Grolman.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:25
L5	0	Reiner.inv. and Grimbergen.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L6	0	Reiner.inv. and petrus.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L7	1	Reinier.inv. and petrus.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L8	2	Michal.inv. and Kuczynski.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:27

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	91	(544/203).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:15
L2	2	("6355797").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:15
L3	37	Tjay.inv. and Tjioe.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:24
L4	2	Eric.inv. and Grolman.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:25
L5	0	Reiner.inv. and Grimbergen.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L6	0	Reiner.inv. and petrus.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L7	1	Reinier.inv. and petrus.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:26
L8	2	Michal.inv. and Kuczynski.inv. and melamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/12/24 10:27

10/522,418

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:02:37 ON 24 DEC 2006

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 11:02:49 ON 24 DEC 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 24 Dec 2006 VOL 146 ISS 1

FILE LAST UPDATED: 22 Dec 2006 (20061222/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s melamine/cns

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L2 38425 L1

=> s l1/prep

10/522,418

38425 L1
4338224 PREP/RL
L3 4908 L1/PREP
(L1 (L) PREP/RL)

=> s 13 and mixing
438721 MIXING
L4 236 L3 AND MIXING

=> s two(1)flow or two(1)stream
2305129 TWO
876223 FLOW
105802 TWO(L)FLOW
2305129 TWO
152473 STREAM
12015 TWO(L)STREAM
L5 114344 TWO(L)FLOW OR TWO(L)STREAM

=> s 14 and 15
L6 2 L4 AND L5

=> s 14 and (water or aqueous)
2470906 WATER
179376 AQUEOUS
L7 96 L4 AND (WATER OR AQUEOUS)

=> s 17 and purification
331292 PURIFICATION
L8 2 L7 AND PURIFICATION

=> s 16 or 18
L9 4 L6 OR L8

=> d 19 1-4 bib abs

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:162677 CAPLUS
 DN 140:200269
 TI Production of melamine with controlled properties of melamine crystals
 IN Tjioe, Tjay Tjien; Grolman, Eric; Grimbergen, Reinier; Kuczynski, Michal
 PA DSM Ip Assets B.V., Neth.
 SO PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004016599	A1	20040226	WO 2003-NL546	20030729
	WO 2004016599	A8	20050804		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	NL 1021287	C2	20040217	NL 2002-1021287	20020815
	CA 2494839	A1	20040226	CA 2003-2494839	20030729
	AU 2003256150	A1	20040303	AU 2003-256150	20030729
	EP 1542979	A1	20050622	EP 2003-788176	20030729
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1675186	A	20050928	CN 2003-818786	20030729
	JP 2006501222	T	20060112	JP 2004-528953	20030729
	NO 2005001290	A	20050314	NO 2005-1290	20050314
	US 2006100428	A1	20060511	US 2005-522418	20051017
PRAI	NL 2002-1021287	A	20020815		
	WO 2003-NL546	W	20030729		

AB A process of production of melamine comprises a first mixing step in which at least two melamine-containing flows originating from at least two different processes of melamine production are brought into contact with each other to form a mixture. In a preferred embodiment, at least one melamine-containing flow contains melamine from a low-pressure gas-phase process, and at least one melamine-containing flow contains melamine from a high-pressure liquid-phase process. Thus, a flow of a 4%-aqueous melamine (2 kg/h) from a Stamicarbon gas-phase process was mixed with a flow of a 6%-aqueous melamine (0.4 kg/h) from a high-pressure liquid-phase process, both flows being heated to 97°. The mixture was cooled to 60° in a crystallizer, and melamine crystals having a D50 value of 46 µm and a D90 value of 98 µm were separated by filtration. The melamine crystals produced by cooling a melamine-containing flow from a Stamicarbon gas-phase process only had a D50 value of 87 µm and a D90 value of 183 µm, and, thus, longer dissoln. time during preparation of resins.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2000:161338 CAPLUS
 DN 132:195939
 TI Thermosetting compositions containing carbamate-functional polymers
 prepared by atom-transfer radical polymerization and coatings therefrom
 IN Anderson, Lawrence G.; O'Dwyer, James B.; Simpson, Dennis A.; White,
 Daniela
 PA PPG Industries Ohio, Inc., USA
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000012566	A1	20000309	WO 1999-US19797	19990830
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6306965	B1	20011023	US 1999-375020	19990816
	CA 2340703	A1	20000309	CA 1999-2340703	19990830
	CA 2340703	C	20041102		
	AU 9957927	A1	20000321	AU 1999-57927	19990830
	AU 737520	B2	20010823		
	BR 9913485	A	20010522	BR 1999-13485	19990830
	EP 1112290	A1	20010704	EP 1999-945306	19990830
	EP 1112290	B1	20040804		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002523569	T	20020730	JP 2000-567579	19990830
	ES 2226436	T3	20050316	ES 1999-945306	19990830
	JP 2005089760	A	20050407	JP 2004-278575	20040924
PRAI	US 1998-98616P	P	19980831		
	US 1999-375020	A	19990816		
	JP 2000-567579	A3	19990830		
	WO 1999-US19797	W	19990830		

AB A thermosetting composition comprises (a) a crosslinking agent having at least two functional groups that are reactive with carbamates; and (b) a non-gelled, carbamate-functional polymer prepared by atom-transfer radical polymerization in the presence of an initiator having at least one radically transferable group, and having a well-defined polymer chain structure, mol. weight, and mol. weight distribution. The polymer contains chain structures $-(M)p-(G)q)x-$ and/or $-(G)q-(M)p)x-$, where M is a residue free of carbamate functionality, of ≥ 1 ethylenically unsatd. radically polymerizable monomer; G is a residue having pendant carbamate functionality, of ≥ 1 ethylenically unsatd. radically polymerizable monomer; p and q are average nos. of residues in a block of residues; and p, q, and x are independently selected such that the carbamate-functional polymer has a number average mol. weight ≥ 250 . Also provided are methods of coating a substrate with the compns., the coated substrates, and color-plus-clear composite coatings. Thus, heating a mixture of PhMe 500.0, CuBr₂ 11.2, Cu powder 32.0, and bipyridyl 78.0 parts for 1 h at 50°, cooling, adding 125.0 parts di-Et 2-bromo-2-methylmalonate over 10 min, adding 146.0 parts hydroxypropyl methacrylate (I) and 144.0 parts iso-Bu methacrylate (II) over 15 min, heating 2 h at 70°,

heating to 80°, adding 500.0 parts PhMe and 720.0 parts II over 15 min, heating 2 h at 80°, cooling to 70°, adding 420.0 parts I over 15 min, heating 3 h at 70°, mixing with 200 g xylene and 100 g Magnesol for 30 min at 70°, and filtering gave a hydroxy-functional triblock copolymer (III) containing 70% solids. Solvent stripping 1180.0 parts III at 40°, heating with 0.54 parts butylstannous acid and 1.62 parts tri-Ph phosphite at 140°, adding 365 parts Dowanol PM carbamate over 2 h under 381 mm Hg, increasing the vacuum to 686 mm Hg until distillation ceased, cooling to 90°, and adding 150 parts Dowanol PM, gave a carbamate-functional polymer (IV) having Mn 1434, Mw 1993, Mw/Mn 1.39, and solids 76 weight%. A coating composition comprising IV 80.3, melamine 35.0, flow additive 0.5, dodecylbenzenesulfonic acid 1.0, UV stabilizer 3.0, xylene 10.0, and Et 3-ethoxypropionate 36.0 parts and having 55.4% solids was sprayed on white base-coated panels and cured 30 min at 141°, giving 20° gloss 88, distinctness of image 97, Knoop hardness 11.8, and pencil hardness H.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1970:67001 CAPLUS
DN 72:67001
TI Purification of melamine
IN Kennedy, Thomas W.
PA Allied Chemical Corp.
SO Ger. Offen., 15 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1930844	A	19700102	DE 1969-1930844	19690618
	US 3496176	A	19700217	US 1968-738290	19680619
	NL 6909285	A	19691223	NL 1969-9285	19690618
	FR 2011227	A5	19700227	FR 1969-20396	19690618
	GB 1256178	A	19711208	GB 1969-1256178	19690618
PRAI	US 1968-738290	A	19680619		

AB Melamine (I) contaminated with hydroxytriazines (II) is purified by mixing an NH₃-free solution containing the impure I with an acid with which it forms soluble salts, acidifying to a pH ≤ 7 , crystallizing the II from the solution, and separating. Typically, I was prepared by the cyclotrimerization of urea, and an aqueous slurry of the product was freed of NH₃ by conventional methods. The resulting composition contained ammeline, ammelide, and I in water at 13.45 atm excess pressure and 205°, and was cooled to 45° by flash evaporation in 2 pressure redn stages, to 1.4 atm excess pressure and 49 mm. The solution was then held 30 min, adjusted to pH 6-7 with CO₂, and filtered to removed the precipitated II. The filtrate, containing the soluble I carbonate, was used as a coolant for the effluent from the I reactor before the final product was separated. This process removed .apprx.77% of the II. This method does not require an elaborate crystallization procedure and uses readily available materials.

10/522,418

L9 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1965:498450 CAPLUS

DN 63:98450

OREF 63:18123h,18124a

TI Melamine separation from waste gas

PA Nissan Chemical Industries, Ltd.

SO 5 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	GB 1003278		19650902	GB 1964-25520	19640619
	DE 1210866			DE	
PRAI	JP		19630718		

AB Melamine (I) prepared by thermal cracking of urea must be cooled rapidly below its m.p. when under low pressure to avoid decomposition. Rapid cooling by mixing with cold by-product NH₃-CO₂ gases requires very large amts., due to low heat capacity. Water quenching causes some hydrolysis, and the I has to be dried. The addition of limited amts. of water as fine droplets (<200 μ) effects rapid cooling, without significant hydrolysis. Thus, 60 kg. urea and 30 kg. NH₃ were pumped continuously under 120 kg./cm.² per hr. into a vessel at 420° of such size that conversion of urea to I was complete by the overflow time. Overflow was sprayed into a 2nd vessel and the temperature reduced to 150° by the injection of about 17 liters per hr. of water as a fine spray of droplet size <50 μ . The exhaust gas was filtered to give 22 kg./hr. I of 96% purity in 96.8% yield. The melam content was 1.7% and hydrolysis products 0.5%.

10/522,418

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

30.35

36.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-3.00

-3.00

STN INTERNATIONAL LOGOFF AT 11:05:15 ON 24 DEC 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal611bxv

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	AUG 09	INSPEC enhanced with 1898-1968 archive
NEWS	4	AUG 28	ADISCTI Reloaded and Enhanced
NEWS	5	AUG 30	CA(SM)/CAplus(SM) Austrian patent law changes
NEWS	6	SEP 11	CA/CAplus enhanced with more pre-1907 records
NEWS	7	SEP 21	CA/CAplus fields enhanced with simultaneous left and right truncation
NEWS	8	SEP 25	CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS	9	SEP 25	CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS	10	SEP 25	CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
NEWS	11	SEP 28	CEABA-VTB classification code fields reloaded with new classification scheme
NEWS	12	OCT 19	LOGOFF HOLD duration extended to 120 minutes
NEWS	13	OCT 19	E-mail format enhanced
NEWS	14	OCT 23	Option to turn off MARPAT highlighting enhancements available
NEWS	15	OCT 23	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS	16	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS	17	OCT 30	CHEMLIST enhanced with new search and display field
NEWS	18	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS	19	NOV 10	CA/CAplus F-Term thesaurus enhanced
NEWS	20	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS	21	NOV 20	CAS Registry Number crossover limit increased to 300,000 in additional databases
NEWS	22	NOV 20	CA/CAplus to MARPAT accession number crossover limit increased to 50,000
NEWS	23	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	24	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS	25	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS	26	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	27	DEC 18	CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role
NEWS	28	DEC 18	CA/CAplus patent kind codes updated
NEWS	29	DEC 18	MARPAT to CA/CAplus accession number crossover limit increased to 50,000
NEWS	30	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS EXPRESS			NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.